

Please amend the present application as follows:

Claims

The following is a copy of Applicant's claims that identifies language being added with underlining ("____") and language being deleted with strikethrough ("——") or brackets ("[[]]"), as is applicable:

1. (Currently amended) A method for controlling a printing mode, the method comprising:

receiving a request to change a printing mode of a printing device;

generating a digital signature by encrypting with a private key control information;

generating a signed request that requests changing of the printing mode, the signed request including the digital signature;

providing the signed request to the printing device;

the printing device validating the signed request by decrypting with a public key associated with the private key the digital signature to obtain decrypted control information; and

the printing device comparing the decrypted control information with other information to determine if they match, a match indicating that the signed request is valid; and

the printing device enabling or disabling the printing mode in accordance with the signed request if the signed request is valid.

2-3. (Canceled)

4. (Currently amended) The method of claim 1, wherein generating a signed request digital signature comprises ~~generating a signed request that includes~~ encrypting control information that includes an identification code of the printing device.

5. (Currently amended) The method of claim ~~[[4]]~~ 1, wherein generating a signed request comprises generating a signed request that further includes ~~at least one of an expiration time, an identification of a client, and an identification of a service provider~~ an unencrypted version of the control information and wherein the other information used in the comparison comprises the unencrypted version of the control information.

6-10. (Canceled)

11. (Original) The method of claim 1, wherein enabling or disabling the printing mode comprises enabling or disabling reduced-toner printing.

12. (Original) The method of claim 1, wherein enabling or disabling the printing mode comprises enabling or disabling CMYK printing.

13. (Currently amended) A system for controlling a printing mode, the system including a computer and a printing device, the system further comprising:

means provided on the computer for generating a digital signature by encrypting with a private key control information;

means provided on the computer for generating a signed request that requests changing of a printing mode of a printing device, the signed request including the digital signature;

means provided on the printing device for validating the signed request ~~on the printing device~~ by decrypting with a public key associated with the private key the digital signature to obtain decrypted control information; and

means provided on the printing device for comparing the decrypted control information with other information to determine if they match, a match indicating that the signed request is valid; and

means provided on the printing device for enabling or disabling the printing mode.

14. (Canceled)

15. (Currently amended) The system of claim 13, wherein the means for generating a ~~signed request~~ digital signature comprise means for generating a digital signature using by encrypting control information including an identification code of the printing device.

16-18. (Canceled)

19. (Original) The system of claim 13, wherein the means for enabling or disabling the printing mode comprise means for enabling or disabling reduced-toner printing.

20. (Currently amended) ~~A system stored on a computer-readable medium, the system~~ Computer-readable media comprising:

logic configured to receive a request to change of a printing mode of a printing device;

logic configured to generate a digital signature by encrypting with a private key control information;

logic configured to generate a signed request ~~on a server computer~~ that requests changing of the printing mode, the signed request including the digital signature;

logic configured to provide the signed request to the printing device;

logic configured to cause the printing device to validate the signed request on a printing device by decrypting with a public key associated with the private key the digital signature to obtain decrypted control information; and

logic configured to cause the printing device to compare the decrypted control information with other information to determine if they match, a match indicating that the signed request is valid; and

logic configured to enable or disable a printing mode on the printing device in accordance with the signed request.

21. (Currently amended) The system of claim 20, wherein the logic configured to generate a ~~signed request comprises logic~~ digital signature is configured to generate a digital signature using a ~~private key and~~ control information including an identification code of the printing device.

22. (Currently amended) The system of claim 20, wherein the logic configured to validate generate the signed request ~~comprises logic is~~ configured to ~~determine if a digital signature of the signed request is valid using a public key~~ generate a signed request including an unencrypted version of the control information and wherein the other information used in the comparison comprises the unencrypted version of the control information.

23. (Withdrawn) A request generator stored on a computer-readable medium, the generator comprising:

logic configured to receive a request from a service provider to change a printing mode of a printing device;

logic configured to verify the authorization of the service provider; and

logic configured to generate a signed request that is configured for installation on the printing device and that requests changing of the printing mode.

24. (Withdrawn) The generator of claim 23, wherein the logic configured to receive a request is further configured to receive an identification code of the printing device.

25. (Withdrawn) The generator of claim 24, wherein the logic configured to generate is configured to generate a digital signature that is based upon the identification code.

26. (Withdrawn) The generator of claim 25, wherein the logic configured to generate is configured to generate the digital signature using a private key.

27. (Withdrawn) The generator of claim 23, further comprising logic configured to provide the signed request to the service provider.

28. (Withdrawn) A request validator stored on a computer-readable medium, the validator comprising:

logic configured to receive a signed request that requests changing of a printing mode;

logic configured to determine an identification code comprised by the signed request;

logic configured to determine if a digital signature of the signed request is valid;
and

logic configured to enable or disable the printing mode.

29. (Withdrawn) The validator of claim 28, wherein the logic configured to determine if a digital signature of the signed request is valid comprises logic configured to decrypt the digital signature using a public key that is associated with a private key that was used to generate the digital signature.

30. (Withdrawn) The validator of claim 28, wherein the logic configured to enable or disable the printing mode comprises logic configured to enable or disable reduced-toner printing.

31. (Withdrawn) The validator of claim 27, wherein the logic configured to enable or disable the printing mode comprises logic configured to enable or disable CMYK printing.

32. (Withdrawn) A printing device, comprising:
a processing device;
a print mechanism; and
memory that includes a request validator, the request validator being configured to receive a signed request that requests changing of a printing mode, determine if a digital signature of the signed request is valid, and enable or disable the printing mode if the signed request is valid.

33. (Withdrawn) The device of claim 32, wherein the request validator is configured to decrypt the digital signature using a public key that is associated with a private key that was used to generate the digital signature.

34. (Withdrawn) The device of claim 32, wherein the request validator is configured to enable or disable reduced-toner printing.

35. (Withdrawn) The device of claim 32, wherein the request validator is further configured to determine an identification code comprised by the signed request and compare it to an identification code of the printing device.

36. (New) The method of claim 4, wherein the identification code is a serial number or a media-access control (MAC) address of the printing device.

37. (New) The method of claim 4, wherein generating a digital signature comprises encrypting print information that further includes an identity of service provider that controls the printing device, identity of a client wishing to use the printing device, or an indication as to when the requested mode is to expire.